

## UNITED STATES PARTMENT OF COMMERCE Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVE	ENTOR	AT	TORNEY DOCKET NO.
087636,C0	59 04/22/96	SANDHU		G	WICR155(95-0
— MARGARET P O BOX :	M. DUNBAR	D1M1/0818	٦	EXAMINER WHIPPLE, M	
	83701-1840			ART UNIT	PAPER NUMBER
				1104	3.
				DATE MAILED:	08/18/97

Please find below and/or attached an Office communication concerning this application or pr ceeding.

Commissioner of Patents and Trademarks



Office Action Summary

Application No.

08/636,069

Applicant(s)

Sandhu et al.

Examiner

Matthew Whipple

Group Art Unit 1104

⊠ Responsive to communication(s) filed on Apr 22, 1996	·				
☐ This action is <b>FINAL</b> .					
☐ Since this application is in condition for allowance except for forma in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D.					
A shortened statutory period for response to this action is set to expir is longer, from the mailing date of this communication. Failure to respapplication to become abandoned. (35 U.S.C. § 133). Extensions of 37 CFR 1.136(a).	ond within the period for response will cause the				
Disposition of Claims					
X Claim(s) 1-24	is/are pending in the application.				
Of the above, claim(s) <i>none</i>	is/are withdrawn from consideration.				
Claim(s)	is/are allowed.				
	is/are rejected.				
Claim(s)					
☐ Claims are subject to restriction or election requirement.					
Application Papers					
☐ See the attached Notice of Draftsperson's Patent Drawing Revie	ew, PTO-948.				
☐ The drawing(s) filed on is/are objected to by the Examiner.					
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.					
☐ The specification is objected to by the Examiner.					
$\hfill\Box$ The oath or declaration is objected to by the Examiner.	•				
Priority under 35 U.S.C. § 119					
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).					
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been					
received.					
received in Application No. (Series Code/Serial Number)					
$\square$ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).					
*Certified copies not received:					
☐ Acknowledgement is made of a claim for domestic priority unde	er 35 U.S.C. § 119(e).				
Attachment(s)					
X Notice of References Cited, PTO-892					
Information Disclosure Statement(s), PTO-1449, Paper No(s)1					
☐ Interview Summary, PTO-413					
□ Notice of Draftsperson's Patent Drawing Review, PTO-948					
□ Notice of Informal Patent Application, PTO-152					
SEE OFFICE ACTION ON THE FOL	LOWING PAGES				

Art Unit:

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 2-050966 (Hisamune).

Hisamune clearly teaches applicant's invention (see Purpose and Constitution). Because the process is identical, including using the same source gases illuminated by a mercury lamp, the atomic concentration of oxygen would inherently be increased. However, applicant is advised that as written, the claim does not necessarily require any such increase because only the intention

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of increasing the atomic oxygen is claimed. Further, Hisamune teaches a deposition temperature

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of about 400° C and applicant claims about 480° C. Temperatures about 400° C, such as 440° C.

would also be about 480° C. Therefore, the Hisamune reference anticipates applicant's deposition

temperature.

However, if it is somehow seen that applicant's deposition temperature is not anticipated,

then this would be a difference.

It has been held that optimization of parameters is obvious (see *In re Aller* 105 USPO 233

(CCPA 1955)).

Therefore, it would have been obvious to choose the temperature of applicant's claimed

process because Hisamune teaches temperatures near applicant's and to provide an efficient

deposition process which provides a quality silicon oxide film, according to the precedent set by

In re Aller.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. U.S. Patent 4,916,091 (Freeman et al.) also anticipates several of applicant's claims

(see col. 16, ln. 63 to col. 17, ln. 55).

5. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Matthew Whipple whose telephone number is (703) 308-2521.

MLW

August 12, 1997

CHARLES I ROWERS JR

SUPERVISORY PATENT EXAMINER

**GROUP 1100**